

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RANDALL C. ARNOLD
and SCOTT D. AUGUSTINE

Appeal 2006-1521
Application 09/815,877
Technology Center 3700

Decided: October 16, 2006

Before GARRIS, KRATZ, and JEFFREY T. SMITH, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 34, 35, 54 and 56.¹ We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

We REVERSE and REMAND.

¹ Claims 36, 37, 40, 44-47, 57-59, 61, 65-68, and 70 are also pending and are objected to by the Examiner.

INTRODUCTION

The claims are directed to a method of controlling air flow through an inflatable device and an apparatus for warming a person. Claims 34 and 35 are illustrative:

34. A method for controlling airflow through an inflatable device having two or more inlet ports for admitting airflow into the device, the method comprising the steps of:
providing a plug;
placing the plug in an inlet port and retaining the plug in the inlet port;
introducing an airflow into the device through another inlet port; and
the plug restricting egress of the airflow through the other inlet port.

35. An apparatus for warming a person, comprising:
an inflatable cover for disposition on a portion of a person's body;
two inlet ports in the inflatable cover; and
a plug removably received in at least one port of the two ports.

The Examiner relies on the following prior art references as evidence of unpatentability:

Dickerhoff	US 5,360,439	Nov. 1, 1994
Anderson	US 5,651,403	Jul. 29, 1997

The Board cites the following prior art reference for consideration by the Examiner consistent with the comments made in the "Remand" section of this decision:

Morten	US 5,075,910	Dec. 31, 1991
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The rejections as presented by the Examiner are as follows:

1. Claims 34, 35 and 54 are rejected under 35 U.S.C. § 102(b) as being anticipated by Dickerhoff.
2. Claims 35 and 56 are rejected under 35 U.S.C § 103(a) as unpatentable over Berke in view of Dickerhoff.

Rather than reiterate the respective positions advocated by the Appellants and by the Examiner concerning these rejections, we refer to the Brief and Reply Brief and to the Answer respectively for a complete exposition thereof.

OPINION

As a threshold matter, Appellants do not separately argue the appealed claims. Accordingly, we choose independent claims 34 and 35 as representative claims on which to render our decision.

35 U.S.C. § 102(b) REJECTION OVER DICKERHOFF

Claim 34 is directed to a method for controlling airflow through an inflatable device having two or more inlet ports for admitting airflow into the device including the following steps: “providing a plug,” “placing the plug in an inlet port and retaining the plug in the inlet port” and “introducing airflow into the device through another inlet port” such that “the plug restrict[s] egress of the airflow through the other inlet port.”

Claim 35 is directed to an apparatus for warming a person including the following structural features: “an inflatable cover for disposition on a

portion of a person's body," "two inlet ports in the inflatable cover" and "a plug removably received in at least one port of the two ports."

The Examiner rejects claims 34, 35 and 54 under § 102(b) over Dickerhoff (Answer 3). The Examiner states that Dickerhoff discloses a "method for controlling airflow through an inflatable device and an apparatus for warming a person as recited in the claims" (Answer 3). The Examiner interprets the "snap disclosed by Dickerhoff as a means for closing the port . . . [such that the snap is] a plug" (Answer 3).

Appellants argue that Dickerhoff's "snap" is not equivalent to the claimed "plug" (Br. 4). In this regard, Appellants indicate that "plug" should be given its plain meaning because Appellants have not defined the term in their specification (Br. 4). According to Appellants, *Webster's New Collegiate Dictionary* and the *McGraw-Hill Dictionary of Scientific and Technical Terms* demonstrate the plain meaning of the term (Br. 4-5). *Webster's* and *McGraw-Hill* define "plug" as "a piece used to fill a hole" and "a piece of material used to fill a hole," respectively (Br. 4-5).

Appellants further argue that Dickerhoff's failure to define "snap" requires this term to be given its plain meaning (Br. 5). Accordingly, Appellants indicate that *Webster's* defines "snap" as "a catch or fastening that closes or locks with a click," and "snap fastener" as "a metal fastener consisting essentially of a ball and socket attached to opposed parts of an article and used to hold meeting edges together" (Br. 5). According to Appellants, the definitions of "plug," "snap" and "snap fastener" indicate that none of the definitions can be read to encompass one another (Br. 5). Appellants also indicate that the general definition of "snap" and "snap fastener" comport with Dickerhoff's "sleeve-like construction of the inlet

ports” wherein the flexible sides of the “sleeve-like construction” would presumably meet to close the inlet port (Br. 5, 7).

Appellants also indicate that Dickerhoff fails to provide any illustration or description of how the “snaps” would be used to close the inlet port (Br. 5). Appellants argue that, because no illustration or description is provided concerning how the “snaps” close the inlet port, Dickerhoff does not enable a person to make or use the invention of claims 34, 35, and 54 (Br. 6). Specifically, Appellants contend that Dickerhoff does not disclose how to form the closure mechanism using his disclosed “snaps” much less Appellants’ claimed “plug” (Br. 6).

Appellants lastly argue that a “snap is not a plug in structure or operation” (Br. 6). In this regard, Appellants argue that a “snap” lacks “‘placing’ and ‘retaining’ or ‘removably receiving’ a ‘plug’ in an inlet port” as is required by the appealed claims (Br. 6).

We agree with Appellants’ ultimate determination that the § 102(b) rejection cannot be sustained.

The Examiner’s only rebuttal to Appellants’ myriad arguments is that Dickerhoff’s “snap does in fact meet the dictionary meaning of the word plug especially in view of how the snap is used in the Dickerhoff reference” (Answer 4). The Examiner’s position appears to be that when Dickerhoff’s snap closes an inlet port the snap fills a hole (i.e., the inlet port) and thereby meets the definition of “plug” provided by Appellants (Answer 4). We cannot agree with the Examiner.

Claim 34 explicitly requires the method of controlling airflow to include “placing the plug *in* an inlet port and retaining the plug *in* the inlet port” (emphasis added). Claim 35 requires “a plug removably received *in* at

least one port . . .” (emphasis added). Dickerhoff fails to disclose these claim features.

Dickerhoff discloses using a closure mechanism which may include “snaps” to seal the end of the inlet ports (Dickerhoff, col. 3, ll. 13-17). However, Dickerhoff does not describe how the “snaps” are positioned with respect to the inlet port. Any assessment of how the snaps are used to close the inlet ports requires speculation. Such speculation does not satisfy the requirements for anticipation.

Anticipation requires that every element as set forth in a claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by a claim, but this is not an *ipsisimilis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Dickerhoff contains a disclosure of a broad concept: providing reclosable mechanisms on the inlet ports of an inflatable thermal blanket. Dickerhoff fails to either expressly or inherently describe how any of the disclosed closure mechanisms are implemented on the inlet ports. Because of such ambiguity in Dickerhoff’s disclosure, it is impossible to determine whether any of Dickerhoff’s closure mechanisms anticipate placing a “plug” “in” an inlet port as claimed. Anticipation requires that the identical invention be shown in as complete detail as is contained in the claim. *Richardson*, 868 F.2d at 831, 15 USPQ2d at 1566. *See also, W. L. Gore &*

Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 314 (Fed. Cir. 1983) (Stating anticipation of product claims cannot be predicated on mere conjecture respecting characteristics of products that might result from practicing the process of the reference).

We reverse the § 102(b) rejection of claims 34-35 and 54 over Dickerhoff.

35 U.S.C. § 103(a) REJECTION OVER BERKE IN VIEW OF DICKERHOFF

Claims 35 and 56 are rejected as being obvious over Berke in view of Dickerhoff. The Examiner in her rejection states that Berke teaches “all of the limitations of the claims except a plug removably received in at least one port of the two ports” (Answer 3). The Examiner indicates that Dickerhoff discloses using a “snap” which is “understood by the Examiner to be a plug” (Answer 3). Based on Dickerhoff’s disclosure, the Examiner reasons that “[t]he snap is a means to allow reclosing of the port after the permanent seal has been broken” such that it would have been obvious to use Dickerhoff’s snap as a “means of reclosing the port of Berke [] once the permanent seal has been broken” (Answer 3).

Appellants argue that there is no motivation to combine “Berke with Dickerhoff” (Br. 7). Appellants base their lack of motivation argument on Berke’s disclosure to use semi-rigid collars as the inlet ports, whereas Dickerhoff appears to use flexible tubes as the inlet ports (Br. 7). Appellants contend that one of ordinary skill in the art would not combine Dickerhoff’s flexible tube closure mechanisms (i.e., “snaps”) with Berke’s semi-rigid collar (Br. 7). As further evidence of no motivation to combine, Appellants

point out that Berke does not teach forming reclosable inlet ports (Br. 7). According to Appellants, resealing inlet ports is not a problem that Berke addresses or solves (Br. 7).

The Examiner rebuts Appellants' arguments by stating that Dickerhoff's "snap, comprises a metal fastener, which is understood by the Examiner to be a semi-rigid material" (Answer 4). According to the Examiner, because Dickerhoff's closure mechanism (i.e., "snaps") is semi-rigid, then it could be "used within a semi-rigid structure because of its [the snaps'] own semi-rigid properties" (Answer 4).

Appellants counter that there is no reasonable expectation of success for the combination of Dickerhoff with Berke (Reply Br. 4). Specifically, Appellants argue that the Examiner failed to explain any reasonable expectation of success for combining Dickerhoff's snap closure mechanism with Berke's semi-rigid collar.

We agree with Appellants' ultimate determination that the § 103(a) rejection cannot be sustained.

Berke discloses that the collars are semi-rigid (col. 5, ll. 12-16, col. 6, ll. 40-42). Dickerhoff discloses that "adhesive strip, double-sided tape, snaps, zippers, folding flaps, or a ziplock-type seal, etc." may be used to close the inlet ports (col. 3, ll. 13-16). As Appellants indicate, Dickerhoff discloses closing mechanisms that appear to involve bringing the opposing sides of the inlet ports together to form the closure (Br. 7).

Based on Dickerhoff's and Berke's teachings, we find no suggestion to combine Dickerhoff's flexible tube closure mechanisms (i.e., "snaps") with Berke's semi-rigid collar. The Examiner's conclusion that it would have been obvious "to provide a snap as taught by Dickerhoff [] as a means

of reclosing the port of Berke [] once the permanent seal has been broken” (Answer 3) fails to take into account the different properties of the inlet port material in Dickerhoff and Berke.

In this latter regard, the Examiner states that because the “snaps” of Dickerhoff apparently are semi-rigid, the snaps “*could* in fact be used within a semi-rigid structure [i.e., Berke’s semi-rigid collar] because of its [i.e., the snaps’] own semi-rigid properties” (emphasis added) (Answer 4). In the first place, this statement is based on unsupported speculation by the Examiner rather than evidence. Secondly, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir.1990). We fail to see any reason why one of ordinary skill in the art would have been motivated to combine a flexible tube closing mechanism (i.e., “snaps”) with a semi-rigid collar based on a reasonable expectation of success. It is appropriate here to emphasize that prior art can be modified or combined to reject claims as *prima facie* obvious only if there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Dickerhoff’s snap closure mechanism is disclosed for use with flexible inlet ports (i.e., ones where opposing sides can be brought together). Berke discloses that his collar is semi-rigid to prevent the flexible walls of the blanket from collapsing or partially folding at the inlet port thereby impeding air flow (col. 5, ll. 12-16). There is no reasonable expectation that combining a flexible tube closure device with a semi-rigid collar would be a successful combination. In fact, how a flexible tube closure would be combined with a semi-rigid collar is unclear. The Examiner’s statement,

“Dickerhoff’s mechanism could in fact be used within a semi-rigid structure because of its own semi-rigid properties” (Answer 4), sheds little light on how the combination would be successfully accomplished.

We reverse the § 103(a) rejection over Berke in view of Dickerhoff.

REMAND

The Examiner and Appellants should consider the patentability of at least claim 34 under § 102(b) over Morten (US 5,075,910). Morten appears to disclose controlling airflow through an inflatable device having two valve means (i.e., two inlet ports) by providing a plug in the first valve means (i.e., first inlet port) (col. 4, ll. 31-65). Morten also appears to disclose placing and retaining the plug in the first valve means (i.e., first inlet port) to restrict egress of air therefrom, while inflating the device from the second valve means (i.e., second inlet port) (col. 4, ll. 66-67; “the inflatable body member 11 is inflated using the first and/or second valve means 55, 63;” emphasis added).

From Morten’s disclosure, either the first or the second valve means (i.e., first or second inlet port) may be used to inflate the device. This disclosure coupled with Morten’s disclosure that the “plug means 59” prevents “air from escaping from the hollow interior 21 of the inflatable body member” necessarily implies that when the second valve means (i.e., second inlet port) is used to inflate the device, then the first valve means (i.e., the first inlet port) is plugged using the “plug means 59.”

It appears that at least claim 34 is anticipated by Morten.

The Examiner and Appellants should also consider the patentability of at least claims 34, 35, 54 and 56 under § 103(a) over the combination of Dickerhoff (US 5,360,439) in view of Morten (US 5,075,910).

Dickerhoff discloses an inflatable blanket having two inlet ports (col. 2, ll. 47-59, col. 3, ll. 13-20). Dickerhoff further discloses making the inlet ports reclosable by adding a variety of different closure devices, such as “adhesive strips, double-sided tape, snaps, zippers, folding flaps, or a ziplock type seal, etc.” (col. 3, lines 15-17). We note that Dickerhoff leaves open-ended the list of possible closure devices.

Morten discloses an inflatable device having first and second valve means (col. 4, ll. 31-32 and 56-57; the “first valve means 55” is the first inlet port and the “second valve means 63” is the second inlet port). Morten also discloses that at least the first valve means (i.e., first inlet port) has an accompanying plug to prevent air from escaping the inflatable device (col. 4, ll. 40-43). Morten further discloses “the inflatable body member 15 is inflated using the first and/or second valve means 55, 63 [i.e., first or second inlet port]” (col. 4, ll. 66-67). This disclosure coupled with Morten’s disclosure that the “plug means 59” prevents “air from escaping from the hollow interior 21 of the inflatable body member” necessarily implies that when the second valve means (i.e., second inlet port) is used to inflate the device, then the first valve means (i.e., the first inlet port) is plugged using the “plug means 59.”

In view of Morten’s disclosure that it is well known to use a plug to seal a first valve means (i.e., first inlet port), it appears that it would have been obvious at the time the invention was made to have substituted Morten’s valve means with a plug closure device for Dickerhoff’s inlet ports

with, for example, snap closure devices because a valve means including a plug is a well known closure device as evinced by Morten. Also, Dickerhoff leaves the list of potential closure devices open-ended such that using a well known closure device as a plug would have been an obvious addition to Dickerhoff's list of possible closure devices.

Therefore, in response to this remand, the Examiner must determine, and make of record the results of this determination, the following: (1) the propriety of rejecting at least claim 34 under 35 U.S.C. § 102(b) as being unpatentable over Morten, and (2) the propriety of rejecting at least claims 34, 35, 54, and 56 under 35 U.S.C. § 103(a) as being unpatentable over Dickerhoff in view of Morten.

This remand to the Examiner pursuant to 37 C.F.R. § 41.50(a)(1) (2006) is *not* made for further consideration of a rejection. Accordingly, 37 C.F.R. § 41.50(a)(2) (2006) does not apply.

CONCLUSION

In summary, we have reversed the § 102(b) rejection of claims 34, 35, and 54 over Dickerhoff.

We have reversed the § 103(a) rejection of claims 35 and 56 over Berke in view of Dickerhoff.

We have remanded the application to the Examiner for consideration consistent with our comments above.

REVERSED & REMANDED

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Application 09/815,877

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